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TACKLING OBESITY IN RURAL VERMONT

COMMUNITY HEALTH PROJECT

Abishag Suresh, MSIII

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Mentors: Anne Somers (Health Care Coordinator), Lisa Moore (Nurse
Manager)

Danville Health Center, Danville, VT

Family Medicine- Rotation 4

8/22/2016

PROBLEM & NEED

- Obesity is a growing issue across the United States
 - Over 2/3 of the US population is overweight (BMI= 25.0 – 29.9) or obese (30+)
 - 38% of the country is obese
- Factors contributing to obesity³:
 - Poor nutrition
 - Decreased physical activity levels
 - Poor sleep
 - Low percentage of breastfeeding
 - Lack of access to healthy foods

Bottom line= Total calories in > Total calories burned
- Adults in America eat 31% more calories today than in 1975
- Vermont struggles with obesity as well:
 - Vermont currently has a 25.1% adult obesity rate²
 - 35.4% of adults are overweight⁵
- Active community interventions to prevent obesity are necessary nationwide

PUBLIC HEALTH COSTS

- Obesity increases risk for a number of diseases including numerous cardiovascular, gastrointestinal, respiratory and endocrine diseases including (but not limited to) type 2 diabetes, GERD, hypertension, stroke, asthma, obstructive sleep apnea and hyperlipidemia^{1,3}
- It is linked to 152 billion dollars of direct costs and 73 billion dollars in preventable costs⁴ per year:
 - Increased ER visits
 - Lost time at work
 - More prescriptions required due to increased number of medical conditions
- Public health cost of obesity in Vermont was calculated to be about \$141 million dollars/year in a study done in 2004^{6,7}

COMMUNITY PERSPECTIVE ON ISSUE/SUPPORT FOR ISSUE

- Spoke with preceptors and a staff person at the community health center to gain perspective that obesity was a very big issue in this area.
- Per interview with Anne Somers, Clinical Coordinator & Lisa Moore, Nurse Manager:
 - Biggest issues in the community right now include chronic pain, diabetes mellitus, cardiovascular issues, obesity and COPD. Of these, obesity is the biggest issue and is connected with a lot of the other health problems.
 - Both Anne and Lisa stated a brochure on simple health diet and exercise tips would be helpful to have around in the office to give to patients. Biggest topics to include would be how to break down exercise into 5-10 minute intervals, diet tips, websites and apps in addition to the importance of drinking water, how much to snack and how to exercise if you have hip or knee pain.
 - Barriers to achieving a healthy weight include time, ailments such as bad hips or knees, access to healthy food (cost is an issue), transportation issues (can't get to healthy food source venues such as Veggie VanGo) or a lack of knowledge of how to prepare healthy, tasty foods

ANONYMOUS INTERVIEW FROM COMMUNITY MEMBER

- Most pressing health issues include poor diet, not enough exercise
 - Body type of students and people over the years have changed
 - She mentioned how obesity led to multiple other health issues (knee/joint problems)
 - Factors that compound the issue of obesity:
 - Long winters: being indoors without being able to go outside
 - Expensive health clubs & boot-camps [initiation fees for joining]- Mill; St. Johnsbury academy
 - It takes a lot of time to prepare healthy foods; families are very busy nowadays and don't eat together
 - Schools have a lot of responsibility nowadays to prepare delicious looking lunches that are healthy
 - Some schools also don't qualify for Farm → School programs (Such as Danville)
 - Parents unaware of what are unhealthy vs. healthy foods
 - People in community unaware of programs such as Farm to Table or assistance-ship programs that exist to buy Farmer's Market foods if you can't afford healthy options
- Schools have tried to institute nutrition policies as parents were sending students to school with unhealthy snacks such as twinkies with minimal results
- Simplified tips on a brochure would be helpful

METHODS & INTERVENTION

- Perform interviews with community members
 - Interview with Nurse Manager Lisa Moore here at Danville Health Center
 - Interview with Health Care Coordinator Anne Somers here at Danville Health Center
 - Interview with a community member
- Make a brochure with websites & links & diet/exercise tips broken down into simple ways
 - Print that out
 - Keep it in rooms here at Danville Health Center
- Make a survey to evaluate effectiveness: What worked? What didn't? More people that came into the clinic? Suggestions for improvement? Other ideas?

RESULTS

- Collaborated with Nurse Manager at DHC Lisa Moore and Health Care Coordinator Anne Somers in addition to other staff here at DHC to come up with a finalized product
- Made and distributed 50 pamphlets for simple steps to take to improve diet and physical activity around the clinic (in provider's offices, in the exam rooms, etc.)

BROCHURE/PAMPHLET CREATED & DISTRIBUTED AT CLINIC

Useful Resources

Websites:

If you want to just get started...

Diet

For general information & tools:



To find healthy recipes:



<https://www.whatscooking.fns.usda.gov/>

Diet & Exercise



<https://supertracker.usda.gov/>

Exercise

<http://www.letsmove.gov/action>

FAQs



I have arthritis and my knees hurt when I go walking. How should I increase my level of exercise?

- Swimming is a great, low-impact form of exercise.

How much water should I drink during the day to stay hydrated?

- Drink enough to keep up with your activity level- about 8 full 8 oz glasses or more

How should I snack during the day?

- Healthy snacks (such as cheese, crackers, veggies or fruits) in 2 hour intervals can help keep hunger at bay

Further steps:

- ❖ See *Exercise & Fitness Resources brochure* here for more physical activity ideas
- ❖ Contact a staff member for additional information
- ❖ Contact your doctor about a referral to a nutritionist

Contact

Danville Health Center
26 Cedar Lane
Danville, VT 05828
802-684-2275



HEALTHY EATING & LIVING

Benefits that last a lifetime



Danville Health Center

(Photo taken by Fiek)

If you want to expand your existing exercise regimen...

- There are many online videos of aerobic exercises of varying length and intensity [ex: Daily Burn on Hulu]
- Look up *workout trainer* app on your phone
- Sign up for a yoga class

Nearby yoga sites:

1. Heart Space Yoga & Movement Center; 446 Railroad St., St. Johnsbury 802-626-3398 [1st class free; open all days]
2. St. Johnsbury Center for Wellbeing 364 Railroad St., St. Johnsbury 802-748-1516 [open M/Th/Fridays]

Websites & Apps to track your fitness

My fitness pal [Website & App]

- <https://www.myfitnesspal.com/>
- Map my fitness [Website]
- <http://www.mammyfitness.com/>
- Daily Burn Tracker [App]
- Stepz- Pedometer [App]

<https://www.supertracker.usda.gov/bwv/> [Website, normal or expert mode]

If money is tight but you want to eat healthy...

- Look into nutrition assistance programs (See staff for further details):
- Senior Farmer's Market Nutrition Program
- Veggie Van Go [Mobile Food Pantry]

Small ways to make a difference

Tip: Regular good sleep can help maintain a healthy weight!



Ideas for simple ways to add exercise:

- ❖ Park the car a little further away from the grocery store or your office building
- ❖ Take the stairs instead of the elevator if you can
- ❖ Take a short walk with your spouse, child, sibling, friend or grandchild
- ❖ Stand up more during the day
- ❖ Walk to the mailbox to pick up your mail
- ❖ Go to pick your own berries
- ❖ Start a garden or if you already have one, garden once or twice a week

Key Facts about nutrition

- 1 pound of weight= 3500 calories [general estimate]
- Calories in 1 can (12 oz) of soda= 150
- Any weight loss can help!
- Only 5-10% weight loss is needed to see health benefits!
- For a 200 pound person
 - 5%= 10 pounds
 - 10%= 20 pounds
- 30 minutes of aerobic exercise (running, walking, etc.)/day is recommended for good health

Thirty minutes/day can be broken up into:

- 5 minute intervals
- 10 minute intervals

****You only need to cut back by 500 calories a day to lose a pound in a week! ****

500 calories =

- 3.25 cans of Coca Cola
- ~3 cans of beer
- 2.5 medium size donuts

Quick Tip: Try substituting a glass of water for a can of soda/beer/juice each day


EVALUATION OF EFFECTIVENESS & LIMITATIONS OF INTERVENTION

- Discussed plan for evaluation with Lisa Moore and Anne Somers
- Made a 6 question paper survey (which could be administered via phone) to assess if patient's found brochure useful:
 - Questions included: Did you use the materials? Were they helpful? What have you done differently because of the material? Do you have any suggestions for what could have been done differently? Other comments or suggestions
 - The surveys will be placed in the clinic rooms and will be given with a stamped address about where to return the survey at the same time as the brochure
- Conduct phone interviews using paper survey questions: Speak with patients about whether they found brochures helpful and what they would have liked to see done differently or added
- After a reasonable amount of time (possibly 1 month), an in-office 3-question survey could be given to assess usefulness of intervention to providers:
 - Were brochures used?
 - Were they helpful?
 - Suggestions for improvement
- Due to the many socioeconomic, cultural and genetic factors that influence obesity, it is hard to address this many intersected concerns in one brochure

SURVEY CREATED TO DETERMINE EFFECTIVENESS OF BROCHURE

Resource Satisfaction Survey

Danville Health Center
26 Cedar Lane, PO Box 185, Danville, VT 05828


(photo credit Flek)

Danville Health Center requests your help. Please complete the following Resource Satisfaction Survey based on the Healthy Eating & Living brochure you were given. Thank you for your time. We sincerely hope your efforts to improve your health are successful!

Please hand this survey to a staff member or mail it in to the address above RE: Health Care Coordinator when completed.

Name (You may remain anonymous if you choose):

Date:

1. Did you use the materials provided?

☐ Not at all ☐ A little bit ☐ Quite a bit ☐ A lot

2. Did you find the material helpful?

☐ Less than desirable ☐ As expected ☐ Better than expected ☐ Consistently better

3. What have you done differently because of the brochure in terms of eating and physical activity? (Check all that apply or write in an answer below)

☐ Tried to cut down on certain foods ☐ Was able to sign up for a fitness or diet tracker online ☐ Found an online exercise video that I now use ☐ Used one of the ideas given to increase physical activity ☐ Nothing

Write-in response to question above:

Customer Satisfaction Survey * [Date] 1

4. What additional material would have been helpful to include?

5. Do you have any suggestions for what could have been done differently in the brochure?

6. Other comments or suggestions:

Thank you very much for taking the time to complete this survey. Your feedback is valued and very much appreciated!

Customer Satisfaction Survey * [Date] 2

RECOMMENDATIONS FOR FUTURE INTERVENTIONS

- Review results of surveys
- Edit brochure as needed based on survey results
- Develop a 1 hour workshop on learning how to take small steps to better health with not only brochures but small demos of exercises to do and motivational videos
- Possibly develop more brochures on a more in-depth look at how to address specific topics addressed in my brochure- i.e. separate brochures for diet and exercise

REFERENCES

1. **Lenz, M., Richter, T., & Mülhauser, I. (2009). The Morbidity and Mortality associated with Overweight and Obesity in adulthood. *Deutsches Ärzteblatt International*, 106(40), 641-648.**
2. Trust, Health, A., & Foundation, R. W. J. (2004). The healthcare costs of obesity: The state of obesity. Retrieved September 20, 2016, from The State of Obesity, <http://stateofobesity.org/states/vt/>
3. CDC. (2016, August 15). Adult obesity causes & consequences. Retrieved September 20, 2016, from CDC, <https://www.cdc.gov/obesity/adult/causes.html>
4. Association, A. P. H. (1980). Public health Infographic - American public health association. Retrieved September 20, 2016, from http://action.apha.org/site/PageServer?pagename=Obesity_Infographic
5. CDC Vermont State profile; <https://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/pdfs/vermont-state-profile.pdf>
6. **Jeffords, J. M. (n.d.). The Overall Costs of Obesity. Retrieved September 22, 2016.** <https://www.uvm.edu/~vlrs/Health/Overall%20costs%20of%20obesity.pdf>
7. E. A. Finkelstein, I. C. Fiebelkorn, and G. Wang, "State-level estimates of annual medical expenditures attributable to obesity," *Obesity Research*, vol. 12 no. 1 (January 2004), pp. 18-24.

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